

Biology of the Neonate

Fetal and Neonatal Research

Editor-in-Chief: A. Minkowski, Paris

Associate Editors: J. Girard, Paris
G. Mestyan, Pécs

T. Oppé, London
A.H. Parmelee, jr.,
Los Angeles, Calif.

N. Räihä, Helsinki
H.J. Shelley, Oxford
L. Stern, Providence, R.I.

Counsellors: R. Caldeyro-Barcia,
Montevideo
P. Hahn, Vancouver, B.C.
J.H.P. Jonxis, Groningen
A. Jost, Paris

P. Karlberg, Göteborg
E. Kerpel-Fronius,
Budapest
N. Kretchmer,
Palo Alto, Calif.

J. Lind, Stockholm
W.A. Silverman,
San Francisco, Calif.
C.A. Smith, Boston, Mass.
P. Tizard, Oxford



All rights, including that of translation into other languages, reserved.
Photomechanic reproduction (photocopy, microcopy) of this volume or parts thereof
without special permission of the publishers is prohibited.

© Copyright 1976 by S. Karger AG, Basel (Switzerland), Arnold-Böcklin-Strasse 25
Printed in Switzerland by Thür AG Offsetdruck, Pratteln

Contents

No. 1-2

<i>Salle, B. and Ruitton-Uglienco, A.</i> : Glucose Disappearance Rate, Insulin Response and Growth Hormone Response in the Small for Gestational Age and Premature Infant of Very Low Birth Weight	1
<i>Stoddart, R.W. and Widdowson, E.M.</i> : Changes in the Organs of Pigs in Response to Feeding for the First 24 h after Birth. III. Fluorescence Histochemistry of the Carbohydrates of the Intestine	18
<i>Velázquez, A.; Rosado, A.; Bernal, A.; Noriega, L., and Arévalo, N.</i> : Amino Acid Pools in the Feto-Maternal System	28
<i>Palkovič, M.; Macho, L.; Škottová, N., and Hošťacká, A.</i> : Influence of Early Weaning on the Activity of Several Enzymes in the Liver of Rat	41
<i>Robinson, B.H.</i> : Development of Gluconeogenic Enzymes in the Newborn Guinea Pig .	48
<i>Cooper, A.J. and Cowley, J.J.</i> : The Effect of Litter Size on the Growth, Survival and Behaviour of Neonatal Bulbectomised Mice	56
<i>Zarif, M.A.; Pildes, R.S.; Szanto, P.B., and Vidyasagar, D.</i> : Cholestasis Associated with Administration of L-Amino Acids and Dextrose Solutions	66
<i>Adebonojo, F.O.</i> : Triglyceride Mobilization in Cultured Adipocytes of Human Infants .	77
<i>Schettini, F.; Mattia, D. de; Mautone, A., and Altomare, M.</i> : Post-Natal Development of Factor II (Pre-Prothrombin and Prothrombin) in Man	82
<i>Abdul-Karim, R.W.; Pavy, M.; Beydoun, S.N., and Haviland, M.E.</i> : The Regulatory Effect of Estrogens on Fetal Growth. IV. Brain Development in Growth Accelerated Fetuses in Rabbits	89
<i>Kolena, J.</i> : Ontogenic Development of the Responsiveness in cAMP Synthesis to LH and PGE ₁ and Gonadotropin Receptors in the Rat Ovary	96
<i>Mersmann, H.J.; Phinney, G., and Brown, L.J.</i> : Factors Influencing the Lipolytic Response of Swine (<i>Sus domesticus</i>) Adipose Tissue: Ontogeny	104
<i>Rubaltelli, F.F.; Rondinelli, M.; Zorzi, C., and Saia, O.S.</i> : Amniotic Fluid Surface Tension during Pregnancy	112
<i>Dlouhá, H.</i> : A Micropuncture Study of the Development of Renal Function in the Young Rat	117

No. 3-4

<i>McLennan, J.E.</i> : Rib Anomalies in Myelodysplasia. An Approach to Embryologic Inference	129
<i>Torda, C.</i> : Effects of Recurrent Postnatal Stresses on Hypothalamic Concentrations of Norepinephrine	142
<i>Krukowski, M. and Smith, J.J.</i> : pH and the Level of Calcium in the Blood of Fetal and Neonatal Albino Rats	148
<i>Jonsson, C.-E.; Tuvemo, T., and Hamberg, M.</i> : Prostaglandin Biosynthesis in the Human Umbilical Cord	162
<i>Luke, D.A.</i> : Dental and Craniofacial Development in the Normal and Growth-Retarded Human Fetus	171
<i>Saunders, R.A.; Milner, A.D., and Hopkin, I.E.</i> : The Effects of Continuous Positive Airway Pressure on Lung Mechanics and Lung Volumes in the Neonate	178
<i>Tu, J. and Wong, C.</i> : Serotonin Metabolism in Normal and Abnormal Infants during the Perinatal Period	187
<i>Dambska, M.; Dydyk, L.; Szretter, T.; Wozniwicz, J., and Myers, R.E.</i> : Topography of Lesions in Newborn and Infant Brains following Cardiac Arrest and Resuscitation. Damage to Brain Stem and Hemispheres	194
<i>Teng, E.L.; Harel, S.; Hartzler, J.; Shapira, Y.; Quilligan, E., and Meulen, J.P. van der</i> : Relations between Birth Weight and Learning Ability in Young Rabbits	207
<i>Amortegui, A.J.; Feinberg, St.S., and Figallo, E.M.</i> : Postnatal Effects of Chemically Induced Intrauterine Growth Retardation on Some Hematological Values in the Rat	216
<i>Cloonan, M.J. and Shortland, G.M.</i> : Postnatal Decline of Maternally Acquired Antibodies in the Rat	222
<i>Harris, H.; Wilson, S.; Brans, Y.; Wirschafter, D., and Cassady, G.</i> : Nasal Continuous Positive Airway Pressure. Improvement in Arterial Oxygenation in Hyaline Membrane Disease	231
<i>Farrell, Ph.M.; Epstein, M.F.; Fleischman, A.R.; Oakes, G.K., and Chez, R.A.</i> : Lung Lecithin Biosynthesis in the Nonhuman Primate Fetus: Determination of the Primary Pathway <i>in vivo</i>	238
<i>Ogata, E.S. and Holliday, M.A.</i> : The Effects of Starvation, Glucose Infusion, and Normal Feeding, on Muscle Protein Synthesis and Catabolism in the Newborn Guinea Pig	247

No. 5-6

<i>Solomon, S.; Bengele, H.H., and Evan, A.P.</i> : Amino Acid Uptake by Fetal Kidney Slices	257
<i>Gürd, J.R.; Chanez, C.; Kervran, A.; Tordet-Caridroit, C., and Assan, R.</i> : Studies on Experimental Hypotrophy in the Rat. III. Plasma Insulin and Glucagon	262
<i>Petersen, K.W.; Jacobson, C.B.; Telford, I.R., and Del Var Petersen, H.</i> : A Survey of X Chromatin in the Newborn	267
<i>Palkovič, M.; Škottová, N., and Hošťacká, A.</i> : Blood Lipids during Normal and Early Meaning in Rats	274
<i>Mühlendahl, K.E. von; Pachaly, J., and Schmidt-Gollwitzer, M.</i> : Lack of Correlation between Clinical Data and Growth Hormone Concentrations in Cord Blood	281

<i>Jones, C.T. and Ritchie, J.W.K.</i> : Endocrine and Metabolic Changes Associated with Periods of Spontaneous Hypoxia in Fetal Sheep	286
<i>Constantopoulos, A.; Xypolita, A., and Matsaniotis, N.</i> : Adenylate Cyclase Activity in Human Tissues	294
<i>Fenton, E.; Britton, H.G., and Nixon, D.A. †</i> : A Study of the Permeability of the Guinea Pig Placenta to Citrate Using Recirculating Placental Perfusion Technique	299
<i>Kaskel, F.J. and Kleinman, L.I.</i> : Effect of Diet on Renal Response to Salt Challenge in Neonatal Piglets	306
<i>Egberts, J.; Fontijne, P., and Wamsteker, K.</i> : Indication of Increase of the Lecithin/Sphingomyelin (L/S) Ratio in Lung Fluid of Lambs Maternally Treated with Metabolite VIII of Bisolvon®	315
<i>Hervei, S.; Malik, T., and Rötfaussy, M.</i> : Acid-Base Changes of Mature and Premature Neonates following Exchange Transfusion	323
<i>Yao, A.C.; Nergårdh, A., and Boréus, L.O.</i> : Influence of Oxytocin and Meperidine on the Isolated Human Umbilical Artery	333
<i>Schwieler, G.H. and Robertson, B.</i> : Liquid Ventilation in Immature Newborn Rabbits	343
<i>Eshet, R.; Assa, S., and Laron, Z.</i> : Heterogeneity of Pituitary and Endogenous Plasma Human Growth Hormone from Fetuses, Premature and Full-Term Newborns	354
<i>Hoff, K.M.; Baker, P.C., and Buda, R.E.</i> : Precursor and End Product Effects upon Indoleamine Maturation in Mouse Brain	360
<i>Legrand, J.; Selme-Matrat, M.; Rabié, A.; Clos, J., and Legrand, C.</i> : Thyroid Hormone and Cell Formation in the Developing Rat Cerebellum	368
Varia	381
Author Index	382
Subject Index	384

